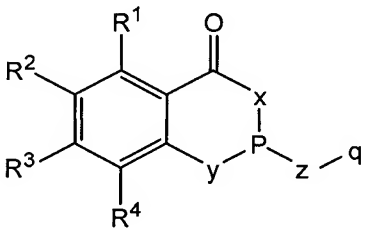
## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-14 (Canceled).

Claim 15 (Currently Amended): A process for hydroformylating olefins, comprising:

~~the reaction of~~ reacting a monoolefin or a monoolefin mixture having from 2 to 25 carbon atoms with a mixture of carbon monoxide and hydrogen in the presence of a heteroacylphosphite of general formula (1) or a corresponding complex with one or more metals of groups 4 to 10 of the Periodic Table of the Elements



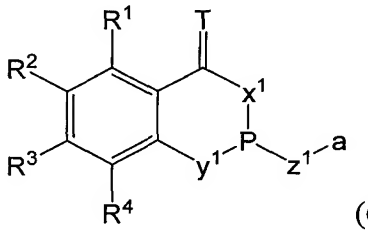

(1)

~~where~~ wherein $R^1$, $R^2$, $R^3$, $R^4$ and q are the same or different and are each a substituted or unsubstituted aliphatic, alicyclic, aromatic, heteroaromatic, mixed aliphatic-alicyclic, mixed aliphatic-aromatic, heterocyclic, mixed aliphatic-heterocyclic hydrocarbon radical having from 1 to 70 carbon atoms, H, F, Cl, Br, I, $-CF_3$, $-CH_2(CF_2)_jCF_3$ ~~where~~ wherein j = 0-9, $-OR^5$, $-COR^5$, $-CO_2R^5$, $-CO_2M$, $-SiR^5_3$, $-SR^5$, $-SO_2R^5$, $-SOR^5$, $-SO_3R^5$, $-SO_3M$, $-SO_2NR^5R^6$, $-NR^5R^6$, $-N{=}CR^5R^6$,

~~where~~ wherein $R^5$ and $R^6$ are the same or different and are each as defined for $R^1$, and

M is an alkali metal, formally half an alkaline earth metal ion, an ammonium or phosphonium ion, x, y, z are each independently O, $NR^7$, S, ~~where~~ wherein $R^7$ is as defined

for q, and x, y, z are not simultaneously O, with the proviso that when q is a radical which has a structural formula (6c)




(6c)

~~where~~ wherein the $R^1$ to $R^4$ radicals are each as defined for formula (1), $x^1$, $y^1$, $z^1$ are each independently O, $NR^7$, S, ~~where~~ wherein $R^7$ is as defined for q, T is an oxygen or an $NR^{30}$ radical, ~~where~~ wherein $R^{30}$ is as defined for q, and the a position serves as the attachment point,

x and $x^1$ must not simultaneously be $N_2$ and

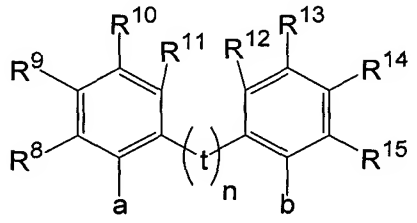
x must not be N when T is $NR^{30}$.

Claim 16 (Currently Amended): The process as claimed in claim 15, ~~characterized in that~~ wherein the $R^1$ and $R^2$, $R^2$ and $R^3$ and/or $R^3$ and $R^4$ radicals form a fused substituted or unsubstituted aromatic, heteroaromatic, aliphatic, mixed aromatic-aliphatic or mixed heteroaromatic-aliphatic ring system.

Claim 17 (Currently Amended): The process as claimed in claim 15, ~~characterized in that~~ wherein the q radical consists of the W-R radicals ~~where~~ wherein W is a divalent substituted or unsubstituted aliphatic, alicyclic, mixed aliphatic-alicyclic, heterocyclic, mixed aliphatic-heterocyclic, aromatic, heteroaromatic, mixed aliphatic-aromatic hydrocarbon radical having from 1 to 50 carbon atoms, and the R radical is $-OR^5$, $-NR^5R^6$, phosphite, phosphonite, phosphinite, phosphine or heteroacylphosphite of formula (6c), ~~where~~ wherein $R^5$ and $R^6$ are the same or different and are as defined for $R^1$.

Claim 18 (Currently Amended): The process as claimed in claim 17, ~~characterized in that~~ wherein

W is a radical of general formula (2)



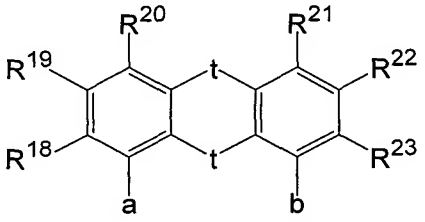

(2)

~~where~~ wherein $R^8$, $R^9$, $R^{10}$, $R^{11}$, $R^{12}$, $R^{13}$, $R^{14}$ and $R^{15}$ are the same or different and are each as defined for $R^1$,

t is a divalent $CR^{16}R^{17}$, $SiR^{16}R^{17}$, $NR^{16}$, O or S radical, and $R^{16}$ and $R^{17}$ are each as defined for $R^5$ and $R^6$, n = 0 or 1 and the a and b positions serve as attachment points.

Claim 19 (Currently Amended): The process as claimed in claim 18, ~~characterized in that~~ wherein in each case two adjacent $R^9$ to $R^{15}$ radicals together form a fused substituted or unsubstituted, aromatic, heteroaromatic, aliphatic, mixed aromatic-aliphatic or mixed heteroaromatic-aliphatic ring system.

Claim 20 (Currently Amended): The process as claimed in claim 18, ~~characterized in that~~ wherein W is a radical of general formula (3):




(3)

~~where~~ wherein

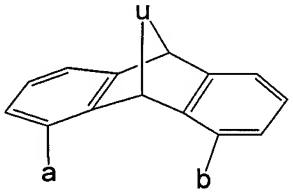
$R^{18}$, $R^{19}$, $R^{20}$, $R^{21}$, $R^{22}$ and $R^{23}$ are the same or different and are each as defined for $R^1$,

t is a divalent $CR^{16}R^{17}$, $SiR^{16}R^{17}$, $NR^{16}$, O or S radical, and $R^{16}$ and $R^{17}$ are each as defined for $R^5$ and $R^6$, n = 0 or 1 and the a and b positions serve as attachment points.

Claim 21 (Currently Amended): The process as claimed in claim 20, ~~characterized in that~~ wherein in each case two adjacent $R^{18}$ to $R^{23}$ radicals together form a fused substituted or unsubstituted, aromatic, heteroaromatic, aliphatic, mixed aromatic-aliphatic or mixed heteroaromatic-aliphatic ring system.

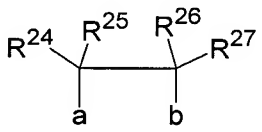
Claim 22 (Currently Amended): The process as claimed in claim 17, ~~characterized in that~~ wherein

W is a radical of general formula (4):

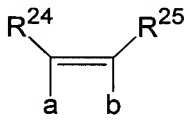



(4)

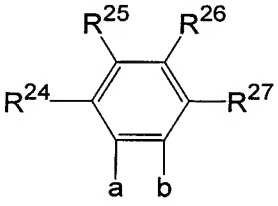
~~where~~ wherein u is a divalent group selected from radicals of formulae (5a), (5b) and (5c)




(5a)




(5b)



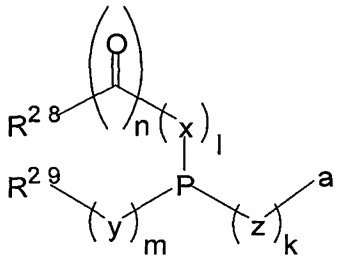

(5c)

in which $R^{24}$, $R^{25}$, $R^{26}$ and $R^{27}$ are the same or different and are each as defined for $R^1$, and the a and b positions serve as attachment points.

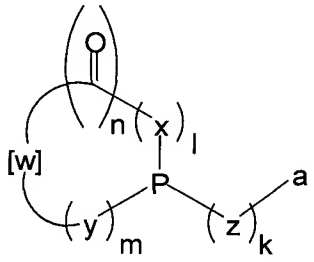
Claim 23 (Currently Amended): The process as claimed in claim 22, ~~characterized in that~~ wherein two adjacent $R^{24}$ to $R^{27}$ radicals together form a fused substituted or unsubstituted, aromatic, heteroaromatic, aliphatic, mixed aromatic-aliphatic or mixed heteroaromatic-aliphatic ring system.

Claim 24 (Currently Amended): The process as claimed in claim 17, ~~characterized in that~~ wherein

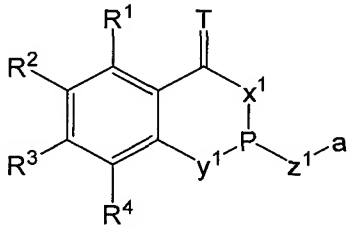
R represents radicals of general formulae (6a), (6b) and (6c):




(6a)




(6b)




(6c)

~~where~~ wherein $R^{28}$ and $R^{29}$ are the same or different and are each as defined for $R^1$,

x, y, z and W are each defined as specified and

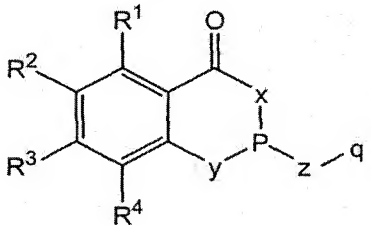
m = 0 or 1, n = 0 or 1, k = 0 or 1, l = 0 or 1,

and the position a serves as the attachment point.

Claim 25 (Currently Amended): The process as claimed in claim 15, ~~characterized in that~~ wherein the metal of groups 4 to 10 of the Periodic Table is selected from the group consisting of rhodium, platinum, palladium, cobalt and ruthenium.

Claim 26 (Currently Amended): The process as claimed in claim 15, ~~characterized in that~~ wherein further phosphorus ligands are present.

Claim 27 (Currently Amended): A process for making a compound, comprising: ~~hydrocyanation, isomerization of olefins or amidocarbonylation~~ hydrocyanating, isomerizing of an olefin or amidocarbonylating in the presence of heteroacylphosphines of formula (1)

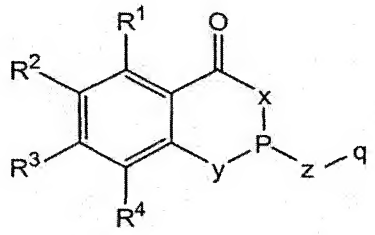



(1)

or metal complexes thereof,

~~where~~ wherein $R^1$, $R^2$, $R^3$, $R^4$ and q are the same or different and are each a substituted or unsubstituted aliphatic, alicyclic, aromatic, heteroaromatic, mixed aliphatic-alicyclic, mixed aliphatic-aromatic, heterocyclic, mixed aliphatic-heterocyclic hydrocarbon radical having from 1 to 70 carbon atoms, H, F, Cl, Br, I, $-CF_3$, $-CH_2(CF_2)_jCF_3$ ~~where~~ wherein j = 0-9, $-OR^5$, $-COR^5$, $-CO_2R^5$, $-CO_2M$, $-SiR^5_3$, $-SR^5$, $-SO_2R^5$, $-SOR^5$, $-SO_3R^5$, $-SO_3M$, $-SO_2NR^5R^6$, $-NR^5R^6$, $-N=CR^5R^6$, ~~where~~ wherein $R^5$ and $R^6$ are the same or different and are each as defined for $R^1$, and M is an alkali metal ion, formally half an alkaline earth metal ion, an ammonium or phosphonium ion, x, y, z are each independently O, $NR^7$, S, ~~where~~ wherein $R^7$ is as defined for $R^1$.

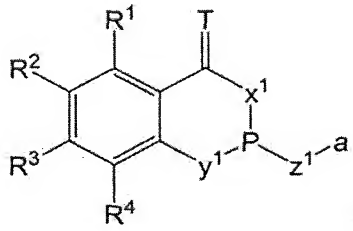
Claim 28 (Currently Amended): A process for carbonylation in the presence of a heteroacylphosphite of formula (1)



(1)

or metal complexes thereof,

~~where~~ wherein $R^1$, $R^2$, $R^3$, $R^4$ and q are the same or different and are each a substituted or unsubstituted aliphatic, alicyclic, aromatic, heteroaromatic, mixed aliphatic-alicyclic, mixed aliphatic-aromatic, heterocyclic, mixed aliphatic-heterocyclic hydrocarbon radical having from 1 to 70 carbon atoms, H, F, Cl, Br, I, $-CF_3$, $-CH_2(CF_2)_jCF_3$ ~~where~~ wherein j = 0-9, $-OR^5$, $-COR^5$, $-CO_2R^5$, $-CO_2M$, $-SiR^5_3$, $-SR^5$, $-SO_2R^5$, $-SOR^5$, $-SO_3R^5$, $-SO_3M$, $-SO_2NR^5R^6$, $-NR^5R^6$, $-N=CR^5R^6$, ~~where~~ wherein $R^5$ and $R^6$ are the same or different and are each as defined for $R^1$, and M is an alkali metal ion, formally half an alkaline earth metal ion, an ammonium or phosphonium ion, x, y, z are each independently 0, $NR^7$, S, ~~where~~ wherein $R^7$ is as defined for q, and x, y, z are not simultaneously 0, with the proviso that when q has a radical which has a structural formula (6c)



(6c)

~~where~~ wherein the $R^1$ to $R^4$ radicals are each as defined for formula (1), $x^1$, $y^1$, $z^1$ are each independently O, $NR^7$, S, ~~where~~ wherein $R^7$ is as defined for q, T is an oxygen or an $NR^{30}$ radical, ~~where~~ wherein $R^{30}$ is as defined for q, and the a position serves as the attachment point, x and $x^1$ must not simultaneously be N and

x must not be N when T is $NR^{30}$.